

The Manufacturing Institute

Brent Weil Senior Director, Education and Workforce

Building Pathways to Advanced Manufacturing Careers



NAM-Endorsed Manufacturing Skills Certification System

- Competency-based learning pathways that are standards-based, performance-based, and proficiency-based
- Interim nationally-portable, industry recognized credentials validating skills for high quality middleclass manufacturing jobs
- A "lifelong learning" approach: multiple points of reentry into education and work leading to career and higher education advancement

The NAM-Endorsed Manufacturing Skills Certification System

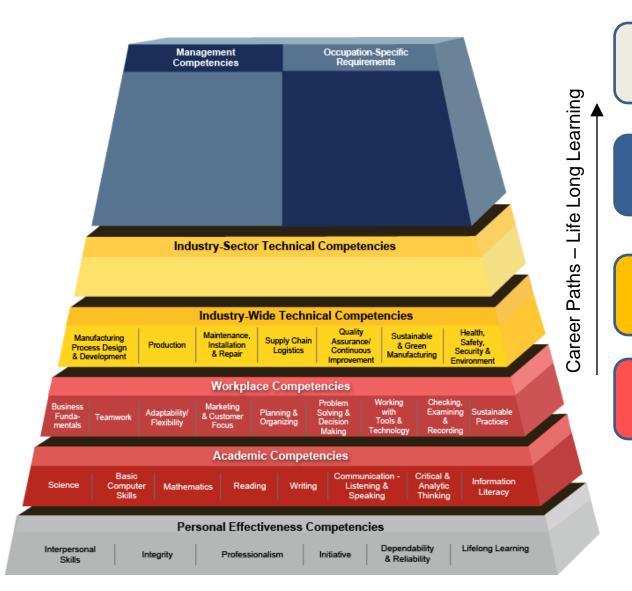


- Aligned to the Manufacturing Competency Model
- Nationally Portable
- Third-Party Validated (ISO/ANSI Preferred)
- Industry-Driven
- Data Based and Supported

June 2011

Advanced Manufacturing Competency Model





High Quality Middle Class Jobs Occupation-Specific Certifications Entry Level Industry Certifications Ready for Work, Ready for College





"If you look at how community colleges are organized... developmental education sits in one silo while non-credit workforce training sits in another silo. To achieve real solutions, we have to be much more integrated in how we deploy these assets.

Roderick Nunn, Vice Chancellor, St. Louis Community College

- High school to community college
- ABE/bridge programs to credit certificate/diploma/degree
- Continuing education to for-credit
- Community college integration into current for-credit programs of study
- Pre-apprenticeship to apprenticeship
- Community college to four-year institutions

Forsyth**Tech**

More Than You Know

ALIGNING EDUCATION, CERTIFICATION AND CAREER PATHWAYS

For the Mechanical and Engineering Fields at Forsyth Technical Community College, Winston Salem, NC

EDUCATION PATHWAY CERTIFICATION PATHWAY **CAREER PATHWAY** \leftrightarrow BACHELOR OF SCIENCE ENGINEERING SME TECHNOLOGY OR SOME OTHER NIMS Level 1 Manual Drill Press Operations \leftrightarrow Maintenance Engineer **ENGINEERING DISCIPLINE** (This is a NIMS Level 1 Manual Milling Plant Engineer potential path not an articulated one) NIMS Level 1 Job Planning, Benchwork, and NCSU, NCA&T, UNC-C, ECU Layout \$51k - \$79k (17-2141) NIMS Level 1 Measurement, Materials, and Safety Career Readiness Certificate ASSOCIATE IN APPLIED SCIENCE NIMS Level 1 Manual Drill Press Operations Mechanical Engineering Technology \leftrightarrow (MECHANICAL ENGINEERING NIMS Level 1 Manual Milling TECHNOLOGY) NIMS Level 1 Job Planning, Benchwork, and 71 Credit Hours \$34k - \$62K (17-3027) Layout 26 Courses NIMS Level 1 Measurement, Materials, and Day Curriculum Safety Career Readiness Certificate CERTIFICATE PROGRAM (CAD) Career Readiness Certificate Mechanical Drafters 13 Credit Hours \leftrightarrow \leftrightarrow \$30k - \$51K (17-3013) 4 Courses Day Curriculum

High School

Dual Enrollment - Career Academy – Youth Development Programs Out of School/Low Skill Youth/Adults

WIA/Career Centers – ESL/VESL - GED/ABE "Bridge" and Foundation Programs

National Career Readiness Certificate
Personal Effectiveness * Academic Competencies Workplace Competencies

Skilled Adults

Retraining/Lay Offs – Continuing Education Company Specific Apprenticeship

Produced with support from Key Links

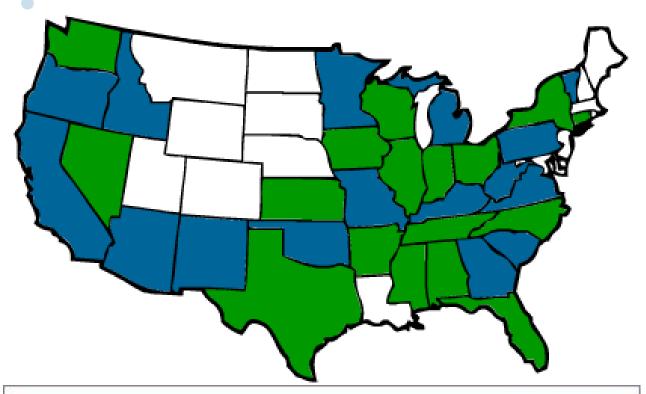
Accelerated Skills Training



- Accelerated Program for NCRC and NIMS Certifications;
- Launched in Minnesota at two colleges;
- Designed to meet specific, immediate demand for CNC operators;
- Expanded to Nevada.



Deployment and National Scope



States with national philanthropic funding for deployment

States with grassroots efforts and strategic partnerships advocating for deployment

Goal to Credential 500,000 Manufacturing Workers by

2016





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Workforce

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